Global Benchmark Report

ICT Product Safety Regulations and Their Impact on the Ease of Doing Business

2022
Table of Contents

Executive Summary .................................................................................................................. 1
Introduction .............................................................................................................................. 3
The Importance of Safe and Compliant Products ................................................................... 3
Guiding Principles .................................................................................................................... 5
  Conduct Impact Assessments ................................................................................................. 5
  Consider Risk ........................................................................................................................ 5
  Align with International Standards ....................................................................................... 6
  Set Flexible Conformity Assessment Procedures ................................................................. 6
  Participate in MRAs and Leverage International Testing Schemes ....................................... 6
  Engage with Stakeholders .................................................................................................... 6
  Use Appropriate Market Surveillance Mechanisms .............................................................. 6
  Evaluate and Modify Periodically ......................................................................................... 7
Overview of the 2022 Scores .................................................................................................. 8
  Broad Scope ........................................................................................................................ 9
  Narrow Scope ...................................................................................................................... 11
A Closer Look .......................................................................................................................... 12
  Broad Scope Detailed Scores and Highlighted WTO Member Countries ............................. 12
    Australia ............................................................................................................................ 12
    United Kingdom ............................................................................................................... 16
    New Zealand .................................................................................................................... 16
    Nigeria, Rwanda, Tanzania, and Zambia .......................................................................... 17
    Chinese Taipei (Taiwan) .................................................................................................... 17
    Israel ................................................................................................................................ 18
    Republic of Korea (South Korea) ..................................................................................... 19
    Uganda ............................................................................................................................. 20
    South Africa ..................................................................................................................... 20
    United States ................................................................................................................... 21
    Uzbekistan ....................................................................................................................... 21
    Argentina .......................................................................................................................... 21
    European Union ............................................................................................................... 22
    Turkey ............................................................................................................................... 23
    China ................................................................................................................................. 24
    Saudi Arabia .................................................................................................................... 25
    India .................................................................................................................................. 25
    Mexico .............................................................................................................................. 26
  Narrow Scope Detailed Scores and Highlighted WTO Member Countries ......................... 27
    Chile .................................................................................................................................. 27
    Thailand ............................................................................................................................ 30
Vietnam .......................................................................................................................... 30
Indonesia ......................................................................................................................... 30

Criteria and Scoring............................................................................................................. 32
Conclusion......................................................................................................................... 37

Figure 1. Global Scoring of ICT Product Safety Regulations – Broad Scope ......................... 13
Figure 2. Global Scoring of ICT Product Safety Regulations – Narrow Scope ....................... 28

Table 1. Product Safety Regulations Scoring - Broad Scope .................................................. 10
Table 2. Product Safety Regulations Scoring - Narrow Scope ............................................... 11
Table 3. Ease of Doing Business Scoring for Broad Scope IT Product Safety Requirements ........ 14
Table 4. Ease of Doing Business Scoring for Narrow Scope IT Product Safety Requirements ......... 29

About ITI. ITI advocates for public policies that promote innovation, open markets, and enable the transformational economic, societal, and commercial opportunities that our companies are creating worldwide. Our members represent the entire spectrum of technology: from internet companies, to hardware and networking equipment manufacturers, to software developers. ITI’s diverse membership and expert staff provide a broad perspective and intelligent insight in confronting the implications and opportunities of policy activities around the world. Visit http://www.itic.org/ to learn more. Follow us on Twitter for the latest ITI news.
Executive Summary

The Information Technology Industry Council (ITI) has published the 2022 Global Benchmark Report, *ICT Product Safety Regulations and their Impact on the Ease of Doing Business* to assess the impact of international product safety regulatory practices that affect information and communications technology (ICT) products. This report recommends positive steps for governments to identify, prevent, and reduce impediments to trade, manufacturing, and supply chain operations. With inspiration from the World Bank’s annual Doing Business Report, ITI has scored 40 countries and the European Union (EU) according to how their product safety regulations for ICT equipment impact the ease of doing business for manufacturers seeking to import and sell their products in these markets.

The World Trade Organization’s (WTO’s) Technical Barriers to Trade (TBT) Agreement has been an essential tool to raise awareness of and address barriers to trade resulting from technical regulations aimed at ensuring ICT product safety. The TBT Agreement provides an appropriate framework for good regulatory practices, and we have used adherence to its core commitments and principles as the basis for scoring countries on their ease of doing business. Based on their knowledge of and experience with various compliance systems around the world, senior compliance managers from ITI’s member companies scored each country’s or region’s product safety requirements. In order to compare ICT product safety regulations of a similar type, ITI divided the scoring into two categories: 1) requirements that impact a broad range of IT products and 2) those that impact a select narrow scope of IT products, such as consumer products, rechargeable batteries, AC adapters or power cords. Based on ITI’s scoring, we found:

- In the broad category, the United Kingdom (UK) scored 28 points due to their commitment to transparency and public participation in the regulatory process and commitment to harmonization in the global regulatory landscape.
- With a total score of 6 points, Mexico ranks last in the broad scope countries, down from 11 points in our 2020 report. Mexico’s poor score is mainly due to limited global stakeholder involvement, unfavorable changes in scope of regulated equipment, and no longer accepting foreign test reports.
- Among the 12 countries evaluated that impose safety requirements for a narrow scope of IT equipment (for example, AC adapters or power cords only), Ecuador, Hong Kong, and Singapore led with perfect scores of 30, while Indonesia ranked the lowest with only 10 points.

ITI compared the scores tallied in this 2022 Ease of Doing Business report with those in our 2020 report:

- Although India’s score remained the same, ease of doing business has been hampered in the country by the intent of multiple agencies to regulate the same products, leading to duplicative certifications.
- Argentina’s score improved because of their commitment to stakeholder consultation and ease of doing business in their recent safety regulation rulemaking efforts.
- Uganda’s score in the past matched other highly-scored nations in Africa but has decreased in this report because of their proposed marking, import clearance, and market surveillance regulations that would impose more costs and regulatory burden without commensurate benefits.
• In the narrow category, Thailand’s score decreased significantly due to their use of tariff codes to defined regulatory scopes, which causes confusion and delay at ports of entry, and the government’s lack of response to stakeholder concerns about this and other crucial issues.
• Indonesia debuted in our report with only 10 points due to very low scores in transparency, avoiding obstacles, predictability, and surveillance.
• Chile’s score improved because their updated regulatory scheme minimizes impacts enhancing surveillance activities and accepting foreign test reports.

ITI concludes that the ease of doing business in most countries could be greatly improved by following good regulatory practices, including early and transparent notification of measures that stand to impact trade, reliance on international standards and acceptance of international test reports (including through reliance on proven international accreditation and testing schemes), participation in mutual recognition agreements (MRAs), adequate transition times, risk-based approaches to regulation and conformity assessment, and avoidance of unjustified impediments that impact trade, manufacturing, and supply chain operations. Before drafting regulatory measures, ITI recommends that government agencies assess their role in facilitating innovation and global access to ICT goods and connected services. Countries should have a sense of their place in the global community and marketplace and thus try to harmonize with other international standards and practices, avoiding divergence that could lead to a fragmented regulatory landscape. To the extent that a country or region’s regulatory approach(es) lead to such fragmentation, there is a risk not only of detrimental impact to trade and access to digital services, but also of technical disruption (i.e., impact on the ability of firms to deliver optimal and secure goods and services), which fall most heavily on small- and medium-sized service providers (SMEs). ITI and its members have decades of experience addressing these challenges around the world, and we invite governments contemplating regulatory schemes to contact us to set up a public-private dialogue that leads to the most effective and efficient regulatory schemes.

ITI recommends the following guiding principles for governments considering a new regulation:
• Foremost, establish a clear and objective safety goal that can best be achieved through regulation.
• Assess and seek to minimize the impact of the regulatory measure on both market access and on the manufacturers and importers that are subject to the regulation.
• Encourage investment and the creation of an open environment for innovative and new technologies and foster competition among the players in the sector, all of which have the desired effect to improve consumer choice and lower costs.
• Assess and seek to lower non-tariff trade barriers that intentionally or unintentionally arise from safety regulations and associated conformity assessment requirements.

Drawing from the WTO TBT Agreement, which governs the process by which countries enact technical regulations, ITI provides industry recommendations for national policymakers to improve their scores while still achieving their public policy and safety objectives. With many countries planning to transition to a new international safety standard for ICT equipment in the coming months and years, following these steps may be essential to prevent further growth in non-tariff trade barriers (NTBs) resulting from unnecessarily complex and burdensome requirements.
Introduction

Information and communications technology (ICT) companies seeking to do business globally must contend with a complex landscape of technical regulations. Not surprisingly, regulatory compliance poses one of the greatest challenges to the ease of doing business and is a critical factor in whether companies succeed or fail. This report, *ICT Product Safety Regulations and their Impact on the Ease of Doing Business*, is the fourth in a series of ITI benchmark reports that score governments based on their national or regional technical regulations on ICT products. This report is intended to be a yardstick and a guide for policymakers to better understand the impacts of their technical regulatory requirements on the ease of doing business. We also share recommendations based on global norms and best practices to promote the creation of policies that promote, rather than hinder, ICT trade and investment.

Every year, the World Bank publishes its “*Doing Business Report*” which ranks economies around the world according to their ease of doing business. The report provides a helpful snapshot and longer-term benchmark of how “business friendly” countries are. Policymakers use the report to evaluate whether regulations are meeting their objectives and to determine where policy changes are needed. The ranking is a measure of how their respective countries stack up against others in terms of creating an environment in which entrepreneurial efforts are likely to succeed and where foreign businesses are drawn to trade and investment opportunities.

Similarly, our report is intended to provide an evaluation of countries’ requirements for ICT product safety and to share industry insights to help regulators achieve their public policy and safety objectives through good regulatory practices that eliminate unnecessary and unjustified impediments on trade, manufacturing, and supply chain operations.

The Importance of Safe and Compliant Products

This report focuses on mandatory ICT product safety requirements in 40 countries and the European Union (EU). Governments seek to protect their citizens from products that could cause injury or property damage (such as electrical shock or fire). As a result, product safety requirements are commonly one of the first types of technical regulations that a government is likely to place on products, and they are the most prevalent type of technical regulation with which ICT companies must comply.

A manufacturer’s fundamental product safety objective is for its ICT products to be safe for their intended use and compliant with the applicable standards and government regulations of those World Trade Organization (WTO) member countries in which the company markets and sells them. A company gains assurance that its products are safe by identifying potential hazards and risks associated with its products, applying adequate safeguards for each identified hazard, and then demonstrating that the applied safeguards mitigate these hazards.

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1 ITI's series of Global Benchmark reports can be found on our website: [https://www.itic.org/advocacy/global-benchmark-reports-on-the-ease-of-doing-business](https://www.itic.org/advocacy/global-benchmark-reports-on-the-ease-of-doing-business)

2 The World Bank scores countries using 10 criteria: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. [https://www.doingbusiness.org/en/doingbusiness](https://www.doingbusiness.org/en/doingbusiness)
Prior to a product release, a company ensures its products are legally compliant by identifying which regulations apply to a particular product or family of products. For each country where the company plans to deliver a product, manufacturers ensure the completion of all necessary product regulatory testing and evaluation to demonstrate its products comply with applicable product regulations, including any relevant standards cited in regulations. A company employs engineers, procures laboratory resources, invests in testing facilities, and bears the costs of product testing and, where required, certifications by third-party organizations.

A company that fails in its commitment and delivers products that are unsafe or that do not comply with legal requirements will likely compromise its access to markets, diminish its relationships with government authorities, adversely impact its customers, and potentially face legal action. Manufacturers recognize that regulations serve a critical role in protecting consumers from harm and setting baseline requirements to preserve and advance public interests. However, manufacturers also believe that governments’ regulatory measures should be consistent with achieving legitimate regulatory objectives, avoid imposing unnecessary burdens on society, and minimize adverse impacts on citizens and business. Companies support product regulations that follow appropriate regulatory practices for establishing essential safety requirements that are risk-based and necessary conformity assessment procedures to fulfill those requirements. Well-designed and implemented product regulations can set an essential baseline for manufacturers, create a growth-enhancing competitive environment, and establish a level playing field among both domestic and foreign companies.

As a rule, ICT companies prefer to manufacture products for the world market instead of “localized” products for a specific country. This provides economies of scale for product design, manufacturing, and delivery. When governments pursue unnecessary regulatory requirements that are unique and burdensome in comparison to global norms, companies lose these economies of scale and struggle to navigate, innovate and adapt to different requirements. Unique and burdensome regulations are not just an inconvenience – they challenge profitability with new costs and create uncertainty about market access.

In response, a company may decide to pass these costs to consumers in the form of higher product prices. Or a company may decide to stop selling certain product models or reduce local investments because of high regulatory costs and unwarranted delays due to interrupted shipments or other penalties. This is especially relevant for small- and medium-sized companies (SMEs) that may not have the resources to address such problems. In turn, consumers and companies both developed and developing economies are disadvantaged when regulations drive up the cost of ICT products and limit access to cutting-edge technologies. For consumers this means a lack of access to critical technologies that bring important economic and social benefits.
Guiding Principles

Before drafting regulatory measures, ITI recommends that government agencies assess their role in facilitating global markets. Countries should have a sense of their place in the global community and marketplace and thus try to harmonize with other international standards and practice, avoiding divergence that could lead to a fragmented regulatory landscape. ITI and its members have decades of experience addressing these challenges around the world, and we invite governments contemplating regulatory schemes to contact us to set up a public-private dialogue that leads to the most effective and efficient regulatory schemes.

When considering a new regulation, we recommend that a government consider multiple objectives, which are discussed in further detail below:

- Foremost, establish a clear and objective safety goal, commensurate with risk, that can best be achieved through regulation.
- Assess and seek to minimize the impact of the regulatory measure on both market access and on the manufacturers and importers that are subject to the regulation.
- Encourage investment and the creation of an open environment for innovative and new technologies and foster competition among the players in the sector, all of which have the desired effect to improve consumer choice and lower costs.
- Assess and seek to lower non-tariff trade barriers (NTBs) that intentionally or unintentionally arise from safety regulations and associated conformity assessment requirements.

Conduct Impact Assessments

After considering the big picture, a government should conduct an impact assessment of relevant alternatives based on a balanced consideration of benefits and costs of the measure. The relevant alternatives should include the evaluation of non-regulatory options where feasible, including a “do nothing” option. This impact assessment should be evidence-based using the best available data, and all qualitative and quantitative factors should be considered, including potential economic, environmental, public health and safety, social, and distributive impacts, as well as the degree and nature of the risks involved.

Consider Risk

Where relevant, feasible, and consistent with regulatory objectives, the government should consider each of the various ICT product categories and its associated safety risks (such as the likelihood of occurrence, the degree of injury, etc.). For example, a wireless mouse operated by two AAA batteries poses a different level of risk than a notebook and its power (e.g., AC) adapter, which are different still to a data server under the control of and operated by engineering professionals. We recommend that governments consider exempting very low risk product categories from regulatory measures while providing for a range of conformity assessment (CA) alternatives that may include Type Approval (TA) models for higher risk products and Supplier Declaration of Conformity (SDoC) for lower risk products.
Align with International Standards

When the impact assessment demonstrates regulatory measures are necessary for ICT equipment, a government has the option to align requirements with local, national, or international standards. Generally, a regulation that references or directly permits the use of international standards (such as those from the International Electrotechnical Commission (IEC)) for its technical requirements improves the ease of doing business by harmonizing product requirements across borders. Alternatively, national standards can be considered where they have no or limited differences from the base international standard.

Set Flexible Conformity Assessment Procedures

A government has a range of options in setting conformity assessment (CA) procedures. If the government employs an approach to CA procedures that is not sufficiently rigorous, it may not adequately ensure compliance. On the other hand, a government that employs an overly rigorous approach adds cost and unnecessary burdens on companies. Ideally, a government should set a flexible CA approach that addresses the risks, minimizes burden, and aims for simplicity to achieve a sufficient level of confidence.

Participate in MRAs and Leverage International Testing Schemes

In setting up its product regulation, a government’s choices will either support an open market or hinder trade and competition. Regulatory measures can be designed to avoid unnecessarily divergent or duplicative requirements with other WTO member countries. We recommend governments participate in mutual recognition agreements (MRAs) with other governments or, ideally, leverage trustworthy and trade-facilitative international schemes by recognizing the testing results and approvals of third-party labs who participate in mutual recognition agreements.

Engage with Stakeholders

We recommend governments to be open and transparent when drafting new or changing existing product regulations. Governments can benefit by including robust participation by citizens, industry, and other stakeholders with adequate time, opportunity, and tools (including the internet) for stakeholder input and public comment at appropriate stages of the policymaking process prior to final adoption. Doing so allows companies to prepare for new or changing requirements, provides an opportunity to provide constructive feedback and voice concerns, and improves the predictability of continuous supply chain flow (such as no product holds, on-time changes in design, components, manuals, and labels).

Use Appropriate Market Surveillance Mechanisms

By keeping CA procedures simple, a government can avoid over-regulation, minimize the resources needed to oversee and administer its CA program, and assign more resources to appropriate market surveillance programs that focus on bad actors. The deployment of a good market surveillance program is a key means of controlling product compliance in the market. We recommend that market surveillance programs be complaint-driven and for consumer products, including random sampling of products in the

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3 *i.e.*, All those developed in accordance with Annex 2 to Part 1 (Decision of the Committee on Principles for the Development of International Standards, Guides and Recommendations with relation to Articles 2, 5 and Annex 3 of the Agreement) in the Decisions and Recommendations adopted by the WTO Committee on Technical Barriers to Trade Since 1 January 1995 (G/TBT/1/Rev.13), as may be revised, issued by the WTO Committee on Technical Barriers to Trade.
marketplace. A visual inspection of a product can be conducted to determine if required labels and markings are in place. If an authority has doubts, it can contact the manufacturer with questions or require that a market sample unit undergo selective testing. We recommend that governments prioritize efforts on those companies and products that pose serious risks and on those who are most likely to fail to comply, with greater scrutiny placed on repeat offenders. The benefit is two-fold: as a deterrent for bad actors and an incentive for good actors.

When a product is alleged to pose a hazard and/or not conform to requirements, we recommend that companies be allowed to respond, to provide additional supporting information, or to request further investigation. If the alleged incident is confirmed to be true, the government should impose appropriate intervention actions. Examples include, but are not limited to, formal warnings with a remediation plan, product holds, product recalls, discontinuation of sales, and criminal fines and penalties. We recommend that the regulatory authority follow the principle of proportionality in considering the appropriate intervention action. For a non-compliance event that does not result in a safety hazard (such as minor administrative non-compliance or mislabeling) a warning with remediation plan may be appropriate. For a non-compliance event that directly poses a safety hazard, the intervention action should be to quickly determine which products pose the risk (such as by lot number or date code), remove them from the market, and deter future unsafe products from being released into the marketplace. In a case where a company is intentionally circumventing requirements, criminal fines and penalties may be appropriate.

**Evaluate and Modify Periodically**

ITI recommends that governments monitor and evaluate the effectiveness of existing regulatory measures on a periodic basis through a transparent procedure. Governments can benefit when companies and stakeholders are allowed to provide input into these evaluations. Subsequently, the government can modify, expand, simplify, or repeal its regulatory measures based on what has been learned in the evaluation, with the aim to minimize burden in achieving its regulatory objectives.
Overview of the 2022 Scores

The ITI member company representatives that contributed to this report agreed that regulatory uncertainty poses some of the greatest challenges to their companies’ abilities to succeed in markets around the world, in addition to hindering global economic growth. To address this issue, we encourage the development and adoption of globally aligned, internationally recognized standards and regulatory best practices to help prevent an expanding patchwork of localized rules and regulations.

Based on their knowledge of and experience with various compliance systems around the world, senior compliance managers from ITI’s member companies scored each country’s or region’s product safety requirements using criteria identified by the World Trade Organization’s (WTO’s) Technical Barriers to Trade (TBT) Committee as non-tariff measures that have a critical impact on companies’ abilities to sell their products in the global marketplace. Among other factors, these criteria include an evaluation of a country’s regulatory impact assessments, a determination of whether product safety regulations are based on relevant international standards, and whether the compliance process is predictable for those seeking to import and sell in the market. The full set of criteria and scoring explanations are described in more detail in the “Criteria and Scoring” section.

In order to compare ICT product safety regulations of a similar type, ITI has divided the scoring of the EU and 40 other WTO Member countries into two categories: 1) requirements that impact a broad range of IT products and 2) those that impact a select narrow scope of IT products. The narrow scope might be limited, for example, to consumer products, rechargeable batteries, AC adapters, or power cords.

Some highlights of the 2022 scores:

- The broad category had a median score of 24 points for the 28 countries and the EU evaluated, while the median score for the narrow scope group of countries was 22 out of 30.

- The United Kingdom (UK) scored 28 points. Ease of doing business in the UK is enhanced by their commitment to transparency and public participation in the regulatory process and by their commitment to harmonization in the global regulatory landscape, as evidenced by their post-Brexit adoption of several EU regulations.

- With a total score of 6 points, Mexico ranks last in the broad scope countries, down from 11 points in our 2020 report. Mexico’s score decreased from 11 points in 2020 to 6 points in this 2022 report. Ease of doing business has been impacted in the country by the elimination of exemptions for low voltage (and low risk products), the expiry of the equivalency agreement that allowed acceptance of US test results that meet Mexican requirements, and a lack of communication with industry via appropriate channels in rulemaking processes.

- Among the 12 countries evaluated that impose safety requirements for a narrow scope of IT equipment (for example, AC adapters or power cords only), Ecuador, Hong Kong, and Singapore led with perfect scores of 30, while Indonesia ranked the lowest with only 10 points.
ITI compared the scores tallied in this 2022 Ease of Doing Business report with those in our 2020 report:

- Although India’s score remained the same, ease of doing business has been hampered in the country by the intent of multiple agencies to regulate the same products, leading to duplicative certifications. In addition, India continues to incorporate numerous country-specific deviations into their standards, rather than incorporating internationally recognized standards by reference.

- Argentina’s score improved because of their commitment to stakeholder consultation and ease of doing business in their recent safety regulation rulemaking efforts.

- Although Uganda’s score in the past matched other highly-scored nations in Africa (e.g., Nigeria, Rwanda, Tanzania, and Zambia), it has decreased because Uganda proposed marking, import clearance, and market surveillance regulations that would impose more costs and regulatory burden without commensurate benefits.

- In narrow category, Thailand’s score decreased significantly due to their use of tariff codes to defined regulatory scopes, which causes confusion and delay at ports of entry, and their lack of response to stakeholder concerns about this and other crucial issues.

- Indonesia debuted in our report with only 10 points, because even though Indonesia relies on international standards, their implementation practices have led to very low scores in transparency, avoiding obstacles, predictability, and surveillance.

- Also, in the narrow category, Chile’s score improved because their updated regulatory scheme minimizes impacts enhancing surveillance activities and accepting foreign test reports.

**Broad Scope**

Table 1 summarizes our scoring of product safety regulations and programs in the EU and 40 WTO member countries that regulate a broad scope of ICT products, including servers, consumer equipment, computers, tablets, and mobile phones. Arrows indicate where scores are unchanged (↔) or have increased (↑) or decreased (↓) from our 2020 scoring. Table 3 in “A Closer Look” provides a detailed breakdown of the scoring for each of the criteria for each country.
<table>
<thead>
<tr>
<th>WTO member country</th>
<th>Regulatory Program</th>
<th>Ease of Doing Business Score</th>
<th>Change from 2020 Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Electrical Equipment Safety System (EESS)</td>
<td>28</td>
<td>↓</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Electrical Equipment Safety System (EESS)</td>
<td>28</td>
<td>↓</td>
</tr>
<tr>
<td>United Kingdom (UK)</td>
<td>General Product Safety Regulations; Regulation on Accreditation and Market Surveillance; Electrical Equipment Safety Regulations; Radio Equipment Regulations***</td>
<td>28</td>
<td>New in 2022 report</td>
</tr>
<tr>
<td>Morocco</td>
<td>Mandatory marking for low voltage equipment</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>Pre-shipment Verification of Compliance (PVoC)</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>Pre-shipment Verification of Compliance (PVoC)</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>Pre-shipment Verification of Compliance (PVoC)</td>
<td>28</td>
<td></td>
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<tr>
<td>Zambia</td>
<td>Pre-shipment Verification of Compliance (PVoC)</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Chinese Taipei (Taiwan)</td>
<td>BSMI</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Israel</td>
<td>Standards Institute of Israel (SII) product and system certification</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Republic of Korea (South Korea)</td>
<td>KC Marking (Electrical Appliances Safety Control Act)**</td>
<td>26</td>
<td>↑</td>
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<tr>
<td>Belarus</td>
<td>EuroAsian Commission (Customs Union)</td>
<td>24</td>
<td>↑</td>
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<tr>
<td>Canada</td>
<td>Consumer Product Safety Act and Mandatory Electrical Standards (SCC)**</td>
<td>24</td>
<td></td>
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<td>Kazakhstan</td>
<td>EuroAsian Commission (Customs Union)</td>
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<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>Pre-shipment Verification of Compliance (PVoC)</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>EuroAsian Commission (Customs Union)</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>Pre-shipment Verification of Compliance (PVoC)</td>
<td>24</td>
<td>↓</td>
</tr>
<tr>
<td>South Africa</td>
<td>NRCS</td>
<td>23</td>
<td></td>
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<tr>
<td>Ukraine</td>
<td>MEDT NAAU</td>
<td>22</td>
<td></td>
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<tr>
<td>USA</td>
<td>OSHA (Workplace safety)**</td>
<td>20</td>
<td></td>
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<tr>
<td>Uzbekistan</td>
<td>UZSTANDARD (Agency for Standardization, Metrology and Certification of Uzbekistan)</td>
<td>20</td>
<td>↓</td>
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<td>Argentina</td>
<td>Resolution 169/2018</td>
<td>19</td>
<td>↑</td>
</tr>
<tr>
<td>European Union (EU)</td>
<td>LVD; RED; Machinery Directive**</td>
<td>18</td>
<td>↓</td>
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<tr>
<td>Turkey</td>
<td>Risk-Based Trade Control System (TAREKS)</td>
<td>18</td>
<td>↑</td>
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<td>UAE</td>
<td>Emirates Conformity Assessment System (ECAS)</td>
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<td>China</td>
<td>China Compulsory Certification</td>
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<td>Saudi Arabia</td>
<td>SALEEM and CTIC</td>
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<td></td>
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<td>India</td>
<td>Compulsory Registration Order (CRO); Mandatory Testing and Certification of Telecom Equipment (MTCTE)</td>
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<tr>
<td>Mexico</td>
<td>NOM 001 and NOM 019</td>
<td>6</td>
<td>↓</td>
</tr>
</tbody>
</table>

* In previous reports, Australia and New Zealand were in the narrow scope category.
** Including associated national certification programs that are common under the regulatory program.
Narrow Scope

Table 2 presents our scoring of product safety regulations for 12 WTO member countries that regulate a narrow scope of products, such as AC adapters, or batteries only, or consumer products only. Arrows indicate where scores have increased, decreased or are unchanged from our 2020 scoring. Table 4 in “A Closer Look” provides a detailed breakdown of the scoring for each of the criteria for each country.

**Table 2. Product Safety Regulations Scoring - Narrow Scope**

<table>
<thead>
<tr>
<th>WTO Member Country</th>
<th>Regulatory Program or Product</th>
<th>Ease of Doing Business Score</th>
<th>Change from 2020 Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecuador</td>
<td>Power cord, batt, AC adapter, charger</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Electrical Ordinance Law (Home use products)</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>Consumer Protection Regulation (AC adapter)</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>Safety regulation 2004 (Consumer products connected to AC mains)</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>Denan (AC adapter, Battery)</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>IINMETRO Certification - Power cord, Phone batteries and chargers (HSE exempt)</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>Suruhan Jaya (adapter below 20V is categorized as low risk product); IPv6; Secondary battery standards</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>UPS only</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>System 2 (S mark) Scheme for smartphone power adaptors and low voltage chargers</td>
<td>18</td>
<td>✓</td>
</tr>
<tr>
<td>Thailand</td>
<td>TISI Mandatory Standards (rechargeable batt, UPS)</td>
<td>16</td>
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</tr>
<tr>
<td>Vietnam</td>
<td>MIC Technical Regulations - Secondary lithium batteries; conformity assessment</td>
<td>14</td>
<td>✓</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Regulation № 15: Enforcement of Mandatory Indonesian National Standards for Audio Video and Similar Electronic Apparatus; SDPPI safety aspects</td>
<td>10</td>
<td>✓ New in 2022 report</td>
</tr>
</tbody>
</table>
A Closer Look

To better understand the wide range of scores for each criterion, we provide a more detailed look at product safety regulations in several WTO member countries, including the EU. We highlight best practices and areas for improvement in both broad and narrow scope programs. As regulatory systems continue to evolve, we note some recent changes to these programs and expectations for the future. Arrows indicate where scores are unchanged (➡️) or have increased (⬆️) or decreased (⬇️) from our 2020 scoring, as shown in Tables 1 and 2.

Broad Scope Detailed Scores and Highlighted WTO Member Countries

Within the group of countries that have product safety requirements for a broad range of ICT equipment, the median score for ease of doing business was 24, up from a median of 23 points in our 2020 report, out of a perfect score of 30. Figure 1 provides a graphic representation of the detailed breakdown of scores for each of the WTO member countries listed in Table 3. This section provides detailed discussions of countries that are new to this 2022 report and those whose scores, regulatory schemes, and/or practices changed significantly since our 2020 report.

Australia (Overall Score: 28) ⬇️

In ITI’s 2020 Ease of Doing Business Report on product safety, Australia was classified in the narrow scope category and scored a perfect 30 points. Given the broad applicability of Australia’s Electrical Equipment Safety System (EESS), the country’s scheme is now included in the broad scope category and scores only 28 points. Australia’s score in the criterion of avoiding obstacles has decreased from 5 points to 3 points mainly due to requirements laid out for power supplies and battery chargers.

In early 2022, Australia’s Standing Committee of Official (SCO) issued a draft “Information Bulletin” on power supply/battery charger standards. According to this new information bulletin, AC adapters, such as USB power supply units (PSU), cannot always be certified to the same safety standard as the equipment with which they are used unless the power supplies "specify brand and type of equipment the power supply is to be used with." These prescribed requirements and standards create an unnecessary burden to power supply manufacturers and ITE supply chains. The majority of ICT external power supplies are certified under IEC 62368-1 or IEC 60950-1 and thus are assured to be safe. Australia’s new stance negates the use of the international standard for an ICT PSU or battery charger supplied alone unless the device’s compliance certificate specifies the “Brand and Type of equipment the power supply is to be used with.”

The bulletin also impacts the instructions supplied with equipment. In the case of USB and other external PSUs, many are intended generically for use with ITE (rather than a specific type of ITE), and SCO’s bulletin would require application of a different standard “unless the instructions for use and certificate list the brand and type of class III electronic (ITE, audio, Electrical Equipment Safety System video) equipment it is for use with...”
Figure 1. Global Scoring of ICT Product Safety Regulations – Broad Scope
Table 3. Ease of Doing Business Scoring for Broad Scope IT Product Safety Requirements

<table>
<thead>
<tr>
<th>WTO Member Country</th>
<th>International Standards</th>
<th>Transparency</th>
<th>Regulatory Impact Analysis/Assessment and Avoiding Obstacles</th>
<th>Portability of Conformity Assessment</th>
<th>Predictability</th>
<th>Surveillance</th>
<th>Total Ease of Doing Business Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>5</td>
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<td>3</td>
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<td>3</td>
<td>3</td>
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<tr>
<td>WTO Member Country</td>
<td>International Standards</td>
<td>Transparency</td>
<td>Regulatory Impact Analysis/Assessment and Avoiding Obstacles</td>
<td>Portability of Conformity Assessment</td>
<td>Predictability</td>
<td>Surveillance</td>
<td>Total Ease of Doing Business Score</td>
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<td>-------------------------------------------------------------</td>
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<td>-----------------------------</td>
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<tr>
<td>USA</td>
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<td>3</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>28</td>
</tr>
</tbody>
</table>
Finally, external power supplies use the same tariff codes so there is no way to differentiate intended use at time of import. This is likely to increase the burden for importers, particularly with service replacements or bulk stock (for local system integrators) that do not accompany the ITE product. The changes posed by Australia in their information bulletin impose additional burden with no commensurate impact on product safety or added assurance to the regulator. These requirements indicate that Australia has not taken into account an assessment of regulatory impacts and leads to a score of only 3 point in the avoiding obstacles criterion.

United Kingdom (Overall Score: 28) – New in 2022 report

Post-Brexit, the United Kingdom (UK) is individually scored for the first time in an ITI Ease of Doing Business report. Product safety in the UK is governed by their General Product Safety Regulations 2005 and Regulation on Accreditation and Market Surveillance, which retained the European Union (EU) Regulation No 765/2008, thereby leading to a score of 3 points in the portability of conformity assessment criterion, which mirrors the European Union’s (EU’s) score in the category. ITI has encouraged the UK to support innovation by mirroring product safety policy, thereby minimizing the need for design changes or the creation of extra compliance burdens. By adopting other regulations equivalent to the EU’s Low Voltage Directive (Electrical Equipment (Safety) Regulations 2016), Machinery Directive (Supply of Machinery (Safety) Regulations 2008), and Radio Equipment Directive (Radio Equipment Regulations 2017), the UK has stayed away from unique requirements and is contributing to harmonization in the global regulatory landscape. This is a very significant factor in the UK’s perfect Ease of Doing Business Score of 28 points. In addition, the UK has been very proactive in their harmonization of standards with CENELEC, leading to a high score in the international standards criterion. ITI encourages continuation of this harmonization.

The UK’s score for transparency is enhanced by the publicly available guidance on the UK conformity assessment (CA) mark on the UK government website, ample notifications, and opportunities for robust stakeholder involvement provided by the Department for Business, Energy & Industrial Strategy (BEIS). For example, after conducting a public Call for Evidence on the UK Product Safety Review in May 2021, BEIS has been clear and transparent about next steps in the process of assessing the product safety regulation. As part of their development of post-Brexit product safety regulations, the country published a UK CA mark as an alternative to the EU CE mark. In late 2021, the UK extended the compliance deadline for sole acceptance and validity of the UK CA mark to 1 January 2023, enabling importers and manufacturers to continue to use the EU CE mark until that date. Regulatory flexibility and recognition of the time needed by industry to transition contributes to the UK’s high marks in avoiding obstacles.

New Zealand (Overall Score: 28)

In ITI’s 2020 Ease of Doing Business Report on product safety, New Zealand was classified in the narrow scope category and scored a perfect 30 points. Given the broad applicability of New Zealand’s Electrical Equipment Safety System (EESS), the country’s scheme is now included in the broad scope category and scores only 28 points. New Zealand’s score in the criterion of avoiding obstacles has decreased from 5 points to 3 points mainly due to changes in recognition of certain labels and certificates for low risk products. New Zealand’s EESS classifies equipment into three levels, with Level 1 being the lowest risk and requiring only a voluntary registration in the EESS database. Recently, New Zealand has started
requiring that any voluntarily-submitted Level 1 certificates meet the same rigor as the mandatory Level 2 and 3 certificates. This increased scrutiny for voluntary registration increases burden for low risk products, without enhancing product safety. New Zealand’s labelling requirements do not allow markings for 220 V (volts) or 240 V on products that have a single mains voltage marking (except for parts like mains plus and flexible cords). The only acceptable marking for these products is 230 V. This prohibition on 220 V and 240 V power mains impacts New Zealand’s ease of doing business score by erecting obstacles to conformance for low risk products.

Nigeria, Rwanda, Tanzania, and Zambia (Overall Score: 28)

Nigeria, Rwanda, Tanzania, and Zambia each scored a robust 28 points out of 30, due to the Pre-shipment Verification of Compliance (PVoC) scheme that each of the countries use. Because the scheme is nearly identical across the countries, this report discusses the benefits of this scheme in each of the countries in one section of this report.

The PVoC program employed by Nigeria, Rwanda, Tanzania, and Zambia requires that all products in scope obtain a Certificate of Conformity (CoC) that is issued by an authorized PVoC agent. Issuance of the CoC is dependent on physical inspection of goods prior to shipment, sampling testing and analysis in accredited labs, a quality audit of production processes, and documentation of conformity with regulations in the respective country. A well-defined and clear process contributes to perfect scores of 5 points in the criteria of transparency and predictability for Nigeria, Rwanda, Tanzania, and Zambia.

Chinese Taipei (Taiwan) (Overall Score: 26)

Chinese Taipei scores 26 points in the broad scope category, unchanged from our 2020 report. The Bureau of Standards, Metrology and Inspection (BSMI) engages in best regulatory practices that have ensured high scores in criteria on international standards, transparency, avoiding obstacles, and predictability. BSMI is incorporating international standards CISPR 32 for electromagnetic compatibility (EMC) (CNS 15936:2016) and IEC 62368-1, 3rd edition (CNS 15598-1:2020) for product safety. The agency has been extremely transparent with their process by holding virtual stakeholder meetings and communicating timelines and processes for the standards updates. BSMI avoids obstacles by allowing industry to apply the old BSMI EMC and safety standards during a two-year transition period, the time between announcement of the new standards and their entry into force.

There is room for improvement in Chinese Taipei’s score of 3 points in portability of conformity assessment. For safety, BSMI indirectly accepts certification body reports, but sometimes asks for additional testing after their review of the test reports. In terms of market surveillance, Chinese Taipei checks certifications for products that are in-scope for BSMI and has a BSMI officer assigned to Customs to review shipments. This is one viable solution to the tariff (HS) codes issues highlighted in this report (see text box on page 18): having a knowledgeable technical person from the regulatory agency as a resource for Customs to enhance understanding of how the regulations do or do not apply to the shipment. However, Chinese Taipei still requires a waiver letter based on the product data sheet, so the HS code issue is still problematic. The country’s surveillance score is downgraded because BSMI inspectors often open boxes and tear down machines to verify the test reports. This surveillance process
is especially problematic for niche products because the inspections can cause product damage and create quality concerns for the consumer.

<table>
<thead>
<tr>
<th>Problematic Use of HS Codes to Define Regulatory Scope</th>
</tr>
</thead>
</table>
| The Harmonized System (HS) is a standardized numerical method of classifying traded products. It is used by customs authorities around the world to identify products when assessing duties and taxes and for gathering statistics. Although HS codes can ease the customs clearance process by harmonizing classifications of imports, their use should be limited to tariff and classification purposes. The IT industry has seen a troubling trend where regulatory agencies are using HS codes to identify the scope of product safety regulations and certification schemes, rather than commercial or product descriptions (for instance, using HS 8471.30 rather than “notebook” or “portable automatic data processing machine). Unfortunately, HS codes were never intended to be used to determine the scope of regulatory certification and can unintentionally convey to customs agencies a scope of regulation broader than intended by the agency. This can result in a situation where customs officials examine an HS code and determine that every product under that code requires a certification to enter the country, even if this is not specified in the regulation. Companies are impacted by stopped or delayed shipments, unsaleable products (because customs agents open boxes), and additional paperwork (in cases where per shipment waivers are required).

ITI recommends that countries focus on the regulatory objective, such as product safety, testing and certification, to set the scope of any product safety regulation, rather than HS codes. There are several ways that countries can ensure products are meeting their safety regulations without causing undue burden, delays, and extra paperwork:

- Have customs officials use a database system to check if a shipment is in scope, rather than require additional paperwork simply based on HS code. This will mitigate the issue where customs officials are essentially enforcing product safety regulations that are outside of their scope of expertise. Another solution is to have a regulatory agency representative assigned to work at ports of entry to help make decisions, such as in Taiwan.
- Countries might consider setting up a program for trusted importers, trusted brokers, trusted products, and/or trusted brands. Industry participation in such a program could be based on a proven track record of importing safe products (e.g., 3 years). Intelligent market surveillance like this can relieve backlogs at ports, allowing safe products to get to the market faster.
- Customs clearance could also be based on acceptance of the product in other countries. For examples, Israel’s procedures that come into effect June 2022 allow automatic entry of products accepted in the US (FCC/NRTL mark) and EU (CE mark). |

**Israel (Overall Score: 26)**

The Standards Institute of Israel (SII) product and system certification programs score a perfect 5 points each in the criteria of international standards, transparency, portability of conformity assessment, and predictability. It is anticipated that ease of doing business will be further enhanced in the country as a result of the Israeli Minister of Finance and of the Economy’s July 2021 announcement of a systemwide
plan to open the market to imports and reduce the cost of living. The plan includes binding principles for setting new import regulations that are designed to adapt Israeli regulations to those of other developed countries and remove barriers to the import of goods. The new regulations are expected to de-regulate some low-risk products and to move to a declaration of conformity (DoC) model and eliminate the need to receive prior permits or laboratory tests before products enter Israel.

However, Israel’s score in avoiding obstacles is a 3 of 5 due to the requirements for printing labels and other materials in Hebrew, which can cause issues with shipping the same products to other countries in the region. In addition, ease of doing business is impacted due to the use of HS codes to define the scope of the product safety regulation (see text box on page 18). For example, external power sources and the external charging cradle carry the same HS codes, even though they are very different pieces of equipment with different voltages and thus are treated differently in the product safety regulation. However, customs is treating these products as both being subject to the product safety regulation and thus certification, in order to enter the country.

Israel’s surveillance score is lower in comparison due to its requirements on power supplies and cords. For these products, SII take samples several time per year to monitor compliance. A more business-friendly approach is to rely on a complaint-driven system for market surveillance.

Republic of Korea (South Korea) (Overall Score: 26)

South Korea’s Electric Appliance Safety Control Act requires a KC marking to place products in the country’s market. The South Korea scheme scores 26 points, up from 22 in our 2020 report, largely due to the good regulatory practices implemented by the Korea Agency for Technology and Standards (KATS). With publication of their KC62368-1 standard in August 2021, KATS has allowed applicability of the older standards KC 60065, K 60950-1, and K-60950-22 until the end of 2022, giving a generous grace period for industry to meet the new requirements. This flexibility leads to the maximum score of 5 points in avoiding impacts. In addition, KATS allows grandfathering, under which any product certified with an older KC certificate does not need to be re-tested until the certificate’s expiration or a technical revision of the certified product. This results in a perfect score in predictability. Throughout the process of adopting the standard, KATS was extremely communicative and responsive to queries from industry, enhancing their scores in predictability and transparency.

The only criterion where South Korea’s score was downgraded was in portability of conformity assessment, because of KATS accepting only KC62368-1:2021, which is based on IEC 62368-1 3rd edition. Portability would be enhanced if acceptance of 2nd edition were allowed for some time during a grace period.

Kenya (Overall Score: 24)

Kenya employs a PVoC regulatory scheme very similar to the highly-scored scheme in Nigeria, Rwanda, Tanzania, and Zambia. However, in practice, industry have experienced requirements for visual inspections of goods before shipment. This significantly decreases Kenya’s score in portability of conformity assessment, resulting in a score 4 points lower than other countries in Africa that employ the PVoC scheme.
Uganda (Overall Score: 24)

Historically, Uganda had been using the Pre-shipment Verification of Compliance (PVoC) program common in several countries in Africa (Nigeria, Rwanda, Tanzania, and Zambia). However, in 2021, Uganda proposed marking, import clearance, and market surveillance regulations that would impose more costs and regulatory burden without commensurate benefits. As a result, Uganda’s score, which was 28 points in our 2020 report, is now only 24 points. ITI appreciates Uganda’s use of the WTO TBT Inquiry Point to notify these regulations, leading to a perfect score in the transparency criterion. However, uncertainty as to the outcome of the draft regulations decreases the score in predictability to 3 points.

Uganda’s regulations would require a permit to apply a mark that is specified in the Distinctive Mark regulation of 2018, in addition to the requirements of the PVoC process. This requirement is redundant and creates barriers to trade, an effect which Uganda could mitigate by exempting all ICT equipment, or at least equipment imported for business to business (B2B) sales and professional use, from the proposed regulations, as these items are already reviewed for compliance with Uganda’s compulsory standards under the PVoC process. Furthermore, an exemption from labeling is warranted for these types of imports because B2B and professional use sales transactions are typically not subject to the customer viewing a product label prior to purchase. ITI also recommends that countries like Uganda consider including an option for electronic-labeling, or e-labeling to display regulatory and other important information to consumers and regulators more effectively and efficiently than physical labeling. This can be done on a product’s own built-in display, by providing a link to an internet website, or by providing a scannable source.4

Uganda’s proposed regulation seem to indicate no option for using alternative foreign accredited test labs, which decreases the scheme’s score in the criterion of portability of conformity assessment. ITI has requested that Uganda facilitate market access by basing its technical requirements on international standards (IEC and CISPR) and accept foreign test lab reports less than 5 years old from accredited test labs. This will facilitate market access in Uganda by removing the need for redundant testing in a Uganda National Bureau of Standards (UNBS) or UNBS-recognized lab.

South Africa (Overall Score: 23)

South Africa’s National Regulator for Compulsory Specifications (NRCS) implements product safety requirements and regulations that are based on South African National Standards (SANS) and/or IEC standards, giving South Africa 5 points in international standards. Additionally, NRCS accepts international test reports, either ILAC or those from an ICEE certified body. Despite high scores in a few criteria, South Africa scores zero points in predictability. The conformity assessment process is very slow, often taking months, and issuance of Letters of Authority (LoAs) is another slow step in the process. Industry has experienced trade barriers due to a disconnect between the South African Revenue Service (SARS) restricted import requirements and the scope of NRCS technical regulations. ICT mains connected equipment is covered under NRCS Technical Regulation VC8055 (generally Class III components (non-

4 ITI’s position paper on e-labelling, and the final ISO/IEC standard for it are useful resources for countries considering this option.
 mains)), but SARS has restricted imports for components used in ICT equipment (HS code 8473.30.7). Therefore, SARS is asking for a LoA from NRCS before allowing entry of the equipment. Given the long lead times for LoAs, this is burdensome and causes significant delays for products entering the country. South Africa could enhance its predictability by taking steps to alleviate the HS codes issue, as detailed in our text box on page 18.

**United States (Overall Score: 20) ➦**

There is no unified US regulatory approach for ensuring the safety of all ICT products marketed or sold in the country. Instead, the US Occupational Safety and Health Administration (OSHA) regulates ICT products used in the workplace under its Nationally Recognized Testing Laboratory (NRTL) program. OSHA NRTL regulations cover a wide range of ICT products and are based on a range of US-developed and other international safety standards, some of which deviate significantly from their base international safety standards. As a result, the US scored only 3 points each in the criteria of international standards and portability of conformity assessment.

OSHA’s policymaking is very transparent, with a public commenting process strictly followed through notices in the Federal Register. ITI members report that OSHA performs a limited, obligatory regulatory impact assessment. Most importantly, OSHA’s NRTL program is unique to the US, which prevents manufacturers from leveraging third-party test reports and certifications already obtained outside of the NRTL program. Even with these shortcomings, respondents rated OSHA high for predictability; if a company follows the rules in this unique US regulatory program, then a company has high confidence that the products can be tested and certified on time. However, OSHA scored very low on market surveillance, as OSHA requires two or more NRTL (third party) factory audits of certified products per year.

**Uzbekistan (Overall Score: 20) ➧**

Uzbekistan’s regulatory scheme for product safety is run by UZSTANDARD, the Agency for Standardization, Metrology and Certification of Uzbekistan. Unlike its neighbors (Belarus, Kazakhstan, and Russia), Uzbekistan is not part of the EuroAsian Commission (Customs Union) that scores a total of 24 points for ease of doing business. In Uzbekistan, a local representative is needed and, as of August 2020, markings in the local language are required on products. As a result, Uzbekistan’s score for avoiding obstacles is only 1 point. The country’s score for surveillance is only 3 points due to the requirement for two experts from UZSTANDARD to visit the production site and issue a production analysis report. ITI believes that surveillance based on market sampling or driven by customer complaints facilitate ease of doing business.

**Argentina (Overall Score: 19) ➪**

Argentina’s ease of doing business score improved by 2 points since our 2020 report. In May 2021, Argentina proposed changes to draft safety Resolution 169/2018, finally published as Resolution 1038/2021. The government held limited and focused stakeholder consultations with industry, during which industry expressed concerns about negative impacts of increased testing frequency, testing for certificate extensions, and increased scope of highly specialized equipment (HSE). This limited stakeholder consultation and a lack of WTO TBT notification results in only 3 of the 5 possible points for transparency in this report.
Ultimately, the government of Argentina took into account industry feedback and wrote a final resolution with acceptance of foreign certificates, paperwork-only renewals for certificate extensions, and no change in the scope of HSE equipment. These improvements in ease of doing business increased Argentina’s score in international standards and portability of conformity assessment, as compared to our 2020 report. Manufacturers are still required to undergo surveillance for the original certificate (but not the certificate extension), at an increased frequency of 12 months (down from 18 months). Argentina rated low on its surveillance program because of the requirement to have a sample product tested every year by a lab located in Argentina to verify compliance.

European Union (Overall Score: 18)

The European Union’s (EU’s) score has decreased to 18 points as compared to our 2020 report (in which it scored 20 points). The EU’s score on international standards is only 3 of 5 points because of the European Commission’s consultation review process. In order to give legal effect to standards used in support of regulatory requirements, those standards must first be published as harmonized European Standards (ENs) in the Official Journal of the EU. For ICT product safety, these European Standards are often based on existing IEC standards. The Commission’s Harmonised Standards (HAS) Consultant system slows adoption of international standards, greatly reduces predictability of timeframes, and in some instances results in ENs that substantially and substantively deviate from internationally accepted IEC standards. The HAS Consultant system also affects the EU’s transparency score because input from HAS consultants are often submitted after the international standard has been published, which gives authority to an individual consultant who has not participated in development of the international standard and may be uninformed of specific technical issues and decisions.

To the extent that EU standards diverge from existing international standards, they may lead to unnecessary region-unique regulatory requirements. In addition, delays in the publication of harmonized ENs may generate significant compliance uncertainty, as was the case in 2016 with delayed publication under the Radio Equipment Directive (RED) and in

Emerging Regulatory Trend: Inclusion of Cybersecurity and AI in Product Safety Schemes

The ICT industry has seen an emerging trend of governments incorporating cybersecurity and artificial intelligence (AI) aspects in product safety regulatory schemes. Unfortunately, development of these aspects is often lacking appropriate links with cybersecurity experts, resulting in a lack of understanding of how cybersecurity and AI requirements can impact requirements for product safety, as well as a fragmented regulatory landscape as different countries take various approaches to the issue. ITI urges policymakers to recognize that certification is not a comprehensive solution for cybersecurity. ITI’s Policy Principles for Cybersecurity Certification detail the limits of certification approaches and caution policymakers to avoid viewing cybersecurity certification as a comprehensive, one-size-fits-all solution. Should governments choose to mandate certification schemes even after recognizing their limitations, ITI offers recommendations and step-by-step guidance to help achieve the goals of certification without harming innovation.

2019 with delayed publication under the Low Voltage Directive (LVD). Where the Commission requests the development of new European Standards to be used in support of regulatory requirements, these standards are not available for notification or public consultation prior to the entry into force of the corresponding new regulatory requirements. The EU’s approach to standards is also problematic in the context of recent proposals to amend the RED to mandate a common charger across many devices. Although this proposal is being undertaken in the name of environment and consumer convenience, rather than safety, it is emblematic of potential disconnects from the work IEC TC108 and TC100 have undertaken. The EU should strive to work with standards development organizations (SDOs) to harmonize and prevent a fragmented marketplace for industry.

In 2021, the EU published a proposal for a regulation for machinery products, which contributes to its score of only 3 points in the predictability criterion. Despite ICT equipment being adequately covered by the LVD, EMC Directive, and the RED, the Commission appears to propose to add this equipment to the scope of the new machinery regulations. This would only create overlapping, and perhaps diverging, requirements, and, if there is evidence of specific legal gaps that justifies new rules for ICT equipment, these new rules need to be strictly targeted and should avoid legal uncertainty.

The machinery proposal also impacts the EU score for transparency because it empowers the Commission to adopt, where appropriate, implementing acts to ensure the uniform application of the regulation. Dialogue between industry, civil society, and the Commission is fundamental to ensure that any regulation remains current and applicable in the future and captures relevant technological developments in a fast changing market. Implementing acts provide little opportunity for public scrutiny and stakeholder input, and only in rare instances are Commission proposals subject to meaningful scrutiny and review.

**Turkey (Overall Score: 18)↑**

Turkey regulates products using their “Risk-Based Trade Control System” known as TAREKS, and the score for the scheme has improved by 2 points since our 2020 report. Turkey’s standards are harmonized with EU standards, which enhances their score in the international standards criterion. Turkey’s transparency score is 3 points, due to the Turkish Standards Institution’s (TSE’s) daily publications of standards and directives in the Official Gazette, through which documents are available for purchase. Turkey’s transparency score would increase to 5 points if these documents were made available for free to the public and regulated entities.

Turkey’s scores in avoiding obstacles, portability of conformity assessment, and predictability are downgraded due to some features of implementation in the country. In theory, Turkey implements EU rules so products that can ship into the EU should also ship into Turkey, leading to a score of 3 points in portability of conformity assessment (compared to 1 point in our 2020 report). However, in practice, ITI members have found that shipments enter the country smoothly only if shipped to Turkey from an EU warehouse. Otherwise, Turkey may add extra requirements for compliance documentation for each shipment. Sometimes the extra documentation is just a declaration of conformity (DOC); other times safety certificates are required; and, in a few cases, test reports have been requested before products are released for import. The impact of this random market surveillance is a lack of predictability, leading to a score of only 1 point in the category, and a slow-down in non-EU-originated imports. Exacerbating
the situation, Turkey does not recognize the EU’s maintenance operation exclusion described in the Blue Guide section 2.1. Therefore, Turkey Customs has requested that spare parts show conformance to new standard revisions long after the base supported product is at its end-of-life and is no longer sold. In certain cases, parts, and components of final equipment which, according to EU regulations, would not be subject to CE marking, were held at Customs after Turkish Standards Institution (TSE) inspections due to a lack of CE marking. Manufacturers have been required to demonstrate compliance with related standards or provide technical proof that they would not fall under the related New Approach Directives. TSE has argued that this policy is necessary because Turkey does not have an after-market monitoring system in place to ensure consumer protection.

Further impacting portability of conformity assessment, products tested and certified in the United States (US) to US regulations and standards are likely to have to be re-tested and re-certified to Turkish requirements because of Turkey’s Customs Union agreement with the EU and efforts to adapt all EU regulations, which take a different approach to the protection of the health and safety of consumers and the environment. Also, in some cases, US-originated products, despite having a CE Mark, have been subjected to additional tests upon arrival in Turkey.

Turkey’s ease of doing business score would be significantly enhanced by fully harmonizing standards and practices with EU standards, CE marking acceptances, and Blue Guide practices.

**China (Overall Score: 16)**

The China National Certification and Accreditation Administration (CNCA) coordinates compulsory certification and testing, including the China Compulsory Certification (CCC) mark. China’s score in 2022 is 2 points lower than its 2020 report score (and 4 points lower than the 2017 report score). The country’s score on international standards (1 point) accounts for this decrease. Although China participates in the work and committees of international standards bodies, the government continues to rely on country-specific standards, decreasing their score in international standards. For example, in the recently published safety technical specification for Lithium Ion Cells and Batteries Used in Stationary Electronic Equipment (GB 40165), China wrote a completely new national standard that deviates substantially from the international consensus-based standard. IEC TC108, in which China participates, had already established criteria dictating that IEC 62133-2 or IEC 62619 would be applicable to IT equipment, with the new requirements being incorporated into the 4th Edition draft of IEC 62368-1. Despite China’s participation in IEC, their own standard deviates substantially, an action which will significantly impact ease of doing business. Another example is the draft GB/T Multimedia Device Charging Line, Data Line General Spec (a power over communication cable standard including USB), which has significant implications for cables used with ITE technologies providing power over communication cables. This GB/T standard proposal does not align with UL Outline 9990 which is currently being developed into a US National standard. IEC TC108 is currently working on IEC 63315 (a replacement for IEC 62368-3, clause 5) which has specific requirements to support the latest USB Power Delivery Specification that are not mentioned in China’s latest draft standard (GB/T).

More positively, industry has seen China notify more frequently to the WTO TBT Inquiry Point, with ample comment periods and written dialogue with industry, which contributes to the score of 3 points in transparency. The State Administration for Market Regulation (SAMR) allows some products that
require a declaration of conformity (DoC) to be tested in the manufacturer’s test lab, thus avoiding in-country test requirements. Although this DoC practice does not currently apply to most ICT products, this method does align with regulatory best practices and portability of conformity assessment. We encourage China and SAMR to use risk-based assessments and expand the scope of this DoC scheme to cover more ICT products.

**Saudi Arabia (Overall Score: 16)**

Saudi Arabia’s score is unchanged from the 2020 report. A positive update in the country is the adoption of IEC 62368-1, 3rd edition, by the Standards, Metrology and Quality Organization (SASO), with terms that enhance ease of doing business. The country has eased the transition to the new standard by allowing certifications for SASO-IEC 60950-1 and SASO-IEC 60065 issued before July 2021 to remain valid for one year from the date of issuance before they must transition to SASO-IEC 62368-1:2020 (IEC 62368-1 3rd edition). There is room for improvement in the criterion of portability of conformity assessment because the government is working independently under their SASO certificate of conformity (CoC) scheme rather incorporating Gulf Cooperation Council (GCC) standards even though Saudi Arabia is part of Gulf States agreements. Direct recognition or full harmonization between SASO and GCC standards would be beneficial and would enhance Saudi Arabia’s score in portability of conformity assessment.

We recommend that Saudi Arabia address obstacles created by the new importer registration requirements under the Saudi Product Safety Programme (SALEEM) that mandate unnecessary registrations for multiple importers. Every importer must submit a test report to the SABER system, when this could be done once for each product by the brand manufacturer. Furthermore, the recent introduction of regulatory scope controls based on HS or HTS Codes is not helpful given that tariffs and safety risks are neither dependent nor related (see text box on page 18).

**India (Overall Score: 7)**

India’s overall score is unchanged from ITI’s 2017 and 2020 reports, because there has been little positive movement on issues that are affecting ease of doing business in the country. Since its implementation in 2012, India’s Compulsory Registration Order (CRO), administered by the Ministry of Electronics and Information Technology (MeitY), has created major obstacles to doing business in the country’s rapidly growing market. Among the ITI member companies surveyed for this report, all believe that the CRO has created a unique, overly burdensome, and unnecessarily complex regulatory environment for product safety.

Unfortunately, India has not taken a risk-based approach to regulating product safety, as evidenced by the inclusion of professional products such as servers and storage equipment in the CRO by MeitY. ITI has repeatedly requested that MeitY to align its conformity assessment requirements with international norms, to exempt or reduce the burden on low-risk products like digital cameras, and to focus on improving the safety of products that pose the greatest risk to the Indian public. ITI have pointed out that bringing noncore telecom products, such as servers and consumer devices like smart watches and mobile phones, already under the CRO scheme into the scope of the Telecommunications Engineering Centre’s (TEC)’s telecom certification and testing scheme (MTCTE) creates redundancies in certifications, making it more complex and costly to introduce products to the Indian market. This creates a scenario unique in India where two different regulators (MeitY and TEC) in one country oversee multiple certifications of identical products. Duplicate, redundant, and contradictory regulatory schemes and
requirements may deter industry from launching new products in the Indian market. Despite consistent industry feedback on these issues, India has not addressed longstanding concerns about duplication of product compliance requirements by multiple regulators. Allowing these redundancies to continue increases the cost of compliance, restricts market access, causes import delays, and runs counter to the Indian Government’s stated goals of enhancing ease of doing business and increasing investments in the country. These complexities and costs might ultimately deprive the Indian consumer access to the latest technology products. However, the Indian government has not made any fundamental changes, which keeps their score in avoiding regulatory obstacles at zero.

India’s score on portability of conformity assessment remains zero, because manufacturers still need to submit products from each factory for testing and registration by government-approved labs located in India. Limited capacity and technical expertise of the Indian labs have led to bottlenecks, and manufacturers have been forced to switch labs quickly due to lab suspensions, which contributes to India’s predictability score of zero. Direct acceptance of international reports from ILAC-accredited labs when introducing any new product in India market, followed by effective market surveillance, would help India keep a check on the sub-standard imports. Effective market surveillance means focusing on importers who are still importing products without ensuring due compliance with India’s rules, rather than on brands that have already shown their compliance commitment to safety standards in the country. Improving market surveillance practices would improve ease of doing business and enhance India’s scores in portability of conformity assessment and predictability.

MeitY has enhanced their stakeholder communication and participation since 2017, which has resulted in transparency score of 3 points. However, there is still room for improvement by making the stakeholder meetings truly participatory and even collaborative, rather than simply a means of information dissemination.

**Mexico (Overall Score: 6)**

Mexico’s score has decreased dramatically since 2017, when we scored the country’s regulatory scheme at 24 points, and since our 2020 report in which it scored 11 points. The country’s score on regulatory impact analysis and avoiding obstacles decreased from 3 points to 1 point because certain exemptions have been removed, thereby inhibiting market access. For example, in June 2019, Mexico’s External Commerce rules were amended so that Numeral 10 of Annex 2.4.1, clauses VII and VIII can no longer be used for products under the scope of Normas Oficiales Mexicanas (NOMs) 001, 016, and 019. In the past, the rules allowed manufacturers to forgo NOM certification, as long as a transaction was business-to-business (Clause VII) or used to deliver services considered highly specialized (Clause VIII). With the rule change, Mexico now requires that a third-party certifier registration with HS code or HTC (harmonized tariff code) be included in a manufacturer’s registration and certificate. Under the (Nueva LiGIE [Ley De Los Impuestos Generales de Importacion y de Exportacion], Economia has changed the Mexico HS codes from 8 to 10 digits, causing significant paperwork churn and confusion with inconsistent interpretations of standards and certification requirements by customs officials at the US-Mexico border. These issues downgrade Mexico’s transparency and predictability scores.

In 2020, Mexico passed a Quality Infrastructure Law, which was intended to address some of the transparency issues and allows transfers of test reports and certification to enhance ease of doing business. However, industry has not yet seen any benefit from this law.
Mexico’s transparency score substantially decreased, from 5 points to 1 point, due to the ongoing lack of information about publication of the new version of NOM 019 (a final draft was finally published in late December 2021). Additionally, it is unclear if comments submitted to the WTO TBT Inquiry Point in late 2020 were considered, because industry organizations that submitted via that channel were not listed in the standard published in December 2021. In the new NOM 019, businesses will see substantially increased burdens because the updated NOM eliminates an exception for low voltage products (rated less than 24V dc). Additionally, with this publication of NOM 019, the equivalency agreement that was in place between US and Mexico for 10 years is no longer valid. Industry have repeatedly asked the Mexican government to update the equivalency agreement to include non-dated references to NOM 001, NOM 016, and NOM 019, or at least to update the references to the new standard names. Industry pleas have been ignored and, as a result, test reports from the US that meet the requirements of NOM 001 and NOM 019 are no longer accepted. This leads to a score of 0 points in portability of conformity assessment for Mexico.

Narrow Scope Detailed Scores and Highlighted WTO Member Countries

Within the group of countries that have product safety requirements for a narrow range of IT equipment, the median score for ease of doing business was 26 points, down from 22 in our 2020 report, out of a perfect score of 30. Figure 2 provides a graphic representation of the detailed breakdown of scores for each country listed in Table 3. This section provides detailed discussions of WTO member countries that are new to this report and those whose scores changed significantly since our 2020 report.

Chile (Overall Score: 18)

Chile’s score increased significantly since our 2020 report, from 13 to 18 points. ITI members who reviewed Chile’s regulations found improvement in the publication of Resolution 34474 in 2021, which updates Chile’s System 2 (S mark) requirements for smartphone power adaptors and low voltage equipment. The program requires that all power adaptors for smart phones and external power adaptors for personal computers be certified by SEC (the Chilean Safety Regulator) and a label be on the charger. The updated scheme minimizes impacts by allowing the first production control inspection at factory to be replaced by a first shipment import control inspection, which is handled locally. Chile has also made it possible to leverage CIG-22 and CIG-23 for factory inspections and accepts certificates recognized by the International Accreditation Forum (IAF) and reports recognized by ILAC.

Chile’s score on transparency would increase with longer notification timeframes and increased global stakeholder participation in the development of risk-based regulatory schemes. Chile’s market surveillance score is only 3 points, because some ITI member companies have experienced cases where products that are not frequently or ever in stores (e.g., professional equipment) are treated negatively because the surveillance structure relies on products being on store shelves.
Figure 2. Global Scoring of ICT Product Safety Regulations – Narrow Scope
<table>
<thead>
<tr>
<th>Country</th>
<th>International Standards</th>
<th>Transparency</th>
<th>Regulatory Impact Analysis/ Assessment and Avoiding Obstacles</th>
<th>Portability of Conformity Assessment</th>
<th>Predictability</th>
<th>Surveillance</th>
<th>Total Ease of Doing Business Score</th>
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<td>3</td>
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</table>
Thailand (Overall Score: 16) ↓

The Thai Industrial Standards Institute (TISI) implements Thailand’s safety regulations. Our 2020 report scored Thailand at 20 points, which has dropped to 16 points in this report. Despite notifying several measures to the WTO TBT Inquiry Point, TISI and the Government of Thailand have been non-responsive on several issues of concern, including requests for clarification on the use of tariff codes. In addition, there were major delays in responses to industry requests and questions around QR code and labelling requirements and factory inspections. These issues have led to a score of 1 point in transparency and avoiding obstacles.

TISI’s use of HS codes to define regulatory scope is problematic (see text box on page 18) and is raising obstacles in the form of delays at customs when each manufacturer must apply for a waiver for each shipment that is not required to be certified. Industry have requested that TISI and Thai Customs work together to clarify ambiguities impacting adapters and power cords in scope of their regulation, and these requests have been ignored. These ambiguities always impact predictability, when manufacturers are uncertain how long products that are not in scope of the safety regulations will take to clear customs.

Vietnam (Overall Score: 14) ↓

Vietnam’s technical regulatory scheme, implemented by the Ministry of Science and Technology (MOST) and Ministry of Communications (MIC), has dropped in score from 16 points in our 2020 report to 14 points currently. The country is regulating a narrow scope of products, such as secondary batteries. Vietnam received a top score in referencing international standards. However, Vietnam scored lower than most WTO member countries in aspects of transparency due to the short timeframes provided between publication of regulations and their effective dates and MIC’s inconsistent notification practices.

Generally, industry is seeking a one-year timeframe for compliance with new or revised regulations. MIC has not provided the 60-day review and comment period recommended by WTO TBT for proposed technical regulations and conformity assessment procedures. In addition, queries from industry, whether via the TBT Inquiry Point or directly MIC, go largely unanswered. We encourage MIC and MOST to maintain stakeholder communication and participation, even when travel restrictions are in place. Above all, we encourage MIC and MOST to adopt more advanced notification practices in accordance with the WTO TBT agreement and international norms.

ITI has repeatedly requested that MIC allow existing type approval (TA) certificates to be valid until expiration of the certificates and accept TA applications to new standards ahead of the enforcement (entry into force) date to enhance the predictability of certification timeframes and requirements and decrease costs associated with proposed conformity testing. Because MIC has ignored these requests, Vietnam scored low in avoiding obstacles and predictability.

Indonesia (Overall Score: 10) – New in 2022 report

Indonesia is scored for the first time in one of our Global Benchmark Reports, obtaining a score of 10 out of 30 points for their Regulation № 15: Enforcement of Mandatory Indonesian National Standards for Audio Video and Similar Electronic Apparatus. Although Indonesia relies on international standards, their implementation practices have led to very low scores in transparency, avoiding obstacles, predictability,
Predictability is problematic in Indonesia and obstacles are common due to the frequent publication of requirements after their effective date, leading to a score of 1 point in avoiding obstacles and zero in predictability. For example, when the Directorate General of Resources and Equipment for Post and Information Technology (SDPPI) published Regulation No. 10 of Year 2019, the measure was signed on 12 September, promulgated on 19 September, and only released to industry on 21 October 2019. The electromagnetic compatibility and interference (EMC/EMI), safety, and telecom interoperability testing requirements of the regulation were effective immediately, providing no transition time. This type of retroactive applicability and very short transition times of regulations is very unpredictable and makes compliance by industry extremely difficult and costly. Publication after the effective date and a lack of notification of regulations are not aligned with Indonesia’s commitments to the WTO to maintain transparency under the TBT Agreement. It is essential that Indonesia use the WTO TBT Inquiry Point to enable global industry notification of the country’s regulations and their requirements.

Improving portability of conformity assessment in Indonesia could enhance ease of doing business. Indonesia received only 3 points in this criterion because SDPPI has a unique rule requiring accreditation of a National Certification Body (NCB) for product safety testing. This is a redundant requirement that is unnecessary because product safety testing is already governed under the IECEE certification body (CB) scheme, of which Indonesia is a member.\(^5\)

Doing business in Indonesia became very problematic in 2020 and 2021 due to changes in procedures related to the global COVID-19 pandemic. Initially, until the end of August 2020, the Indonesian government allowed virtual facility audits, conducted by a combination of Indonesian inspectors via Zoom video conferencing and non-Indonesian inspectors in the factory. This was allowed under a temporary waiver that expired at the end of August 2020. Under Government Relation 28/2021, the Indonesia Ministry of Industry has suspended the virtual auditing process for foreign facilities, which is required for certification of products that fall under the mandatory SNI (Indonesia standards) testing. The Indonesian Government refused to extend that waiver despite multiple requests from the US Department of Commerce. Industry with production facilities in the region (e.g., in China and Vietnam), have been unable to renew SNI certifications for power cords and AV equipment, as Indonesian inspectors are unable to physically travel to many other countries in the region due to covid restrictions. This trade obstacle significantly benefits local factories and impacts manufacturers who wish to import into Indonesia and affects more than 500 products for which SNI testing is mandatory. This problematic approach has contributed to scores of 0 points in both predictability and market surveillance.

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\(^5\) IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE): the IECEE CB Scheme is an international system for mutual acceptance of test reports and certificates dealing with the safety of electrical and electronic components, equipment, and products.
Criteria and Scoring

Since its implementation in 1995 with the establishment of the WTO, the TBT Agreement\(^6\) has been an essential tool to help prevent and address barriers to trade resulting from technical regulations aimed at ensuring the safety of ICT products. The TBT Agreement establishes rules and procedures regarding the development, adoption and application of voluntary product standards, mandatory technical regulations, and conformity assessment procedures (such as testing or certification) that determine whether a product meets such standards or regulations. The TBT Agreement requires WTO members develop and apply standards, technical regulations, and conformity assessment procedures on a nondiscriminatory and transparent basis, using relevant international standards and guidelines, when appropriate.\(^7\) ITI considers international standards to be those developed in accordance with the principles outlined in the “Decision of the Committee on Principles for the Development of International Standards, Guides and Recommendations with Relation to Articles 2, 5 and Annex 3 of the Agreement” as published in the WTO’s *Decisions and Recommendations Adopted by the WTO Committee On Technical Barriers To Trade Since 1 January 1995.*\(^8\)

The TBT Agreement provides an appropriate model for many good regulatory practices, and we have used it as the basis for scoring WTO member countries on their ease of doing business. Below, we describe each criterion and how the TBT Agreement asks WTO members to apply it. We also provide a metric and guidance on how each criterion was scored for this report.

1. **Use of international standards with minimal national deviations**

The TBT Agreement calls on WTO members to use relevant international standards, or the relevant parts of them, as a basis for their technical regulations and to use relevant international recommendations and guides, or relevant portions of them, as the basis for their conformity assessment procedures. However, the TBT Agreement does not require the use of international standards, guides, and recommendations if they would be ineffective or inappropriate to fulfill the WTO member’s “legitimate objectives” (Arts. 2.4 and 5.4).

In addition, WTO members should participate “within the limits of their resources” in the preparation, by international standardization bodies, of international standards for products for which they either have adopted, or expect to adopt, technical regulations, and in the elaboration of international guides and recommendations for conformity assessment procedures.” (Art.2.6 and 5.5).

**Score Criteria:**

- **0** National requirements not aligned with relevant international standards.
- **1** National requirements harmonized with relevant international standards with additional national deviations or group differences having a significant impact.

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\(^6\) [https://www.wto.org/english/docs_e/legal_e/17-tbt_e.htm](https://www.wto.org/english/docs_e/legal_e/17-tbt_e.htm)

\(^7\) See: [https://ustr.gov/trade-agreements/wto-multilateral-affairs/wto-issues/technical-barriers-trade](https://ustr.gov/trade-agreements/wto-multilateral-affairs/wto-issues/technical-barriers-trade)

\(^8\) See: Annex 2 of [https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/TBT/1R12.pdf](https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/TBT/1R12.pdf)
3 National requirements harmonized with relevant international standards with additional national deviations or group differences having a minimal impact.

5 National requirements fully harmonized with relevant international standards without any national deviations or group differences.

2. Transparency

To help ensure transparency, the TBT Agreement requires WTO members to publish a notice at an early stage and notify other members through the WTO Secretariat when it proposes to adopt a technical regulation or conformity assessment procedure and to include in the notification a brief indication of the purpose of the proposed measure. These obligations apply whenever a relevant international standard, guide or recommendation does not exist, or the technical content of a proposed technical regulation or conformity assessment procedure is not in accordance with the technical content of relevant international standards, guides, or recommendations. In such circumstances, members must allow “reasonable time” for other members to comment on proposed technical regulations and conformity assessment procedures (the TBT Committee recommends “at least 60 days” (G/TBT/26)), and consider comments it receives from other members (Art. 2.9 and 5.6).

The TBT Agreement establishes a Code of Good Practice that is applicable to voluntary standards and obligates WTO members and standardizing bodies that have accepted it to publish a work program every six months outlining the standards it is currently preparing and to give interested parties at least 60 days to comment on a draft standard. Once the standard is adopted it must be promptly published (Annex 3).

The TBT Agreement also requires that all technical regulations and conformity assessment procedures be promptly published (Art. 2.11 and 5.8).

In addition, the TBT Agreement requires each WTO member to establish an enquiry point to answer all reasonable questions from other members and interested parties and to provide documents relating to technical regulations, standards, and conformity assessment procedures adopted or proposed within its territory (Art. 10.1).

Score Criteria:

- 0 No application
- 1 Some application but inconsistent or incomplete
- 3 Adequate application
- 5 Broad, comprehensive application

3. Regulatory impact assessments and avoiding unnecessary obstacles to trade

When preparing or applying a technical regulation, a WTO member must ensure that the regulation is not more trade-restrictive than necessary to fulfill the member’s legitimate objective (Art. 2.2).

The obligation to avoid unnecessary obstacles to trade also applies to conformity assessment procedures. Conformity assessment procedures should not be prepared, adopted, or applied with a view to, or with the effect of, creating unnecessary obstacles to international trade. Conformity assessment procedures
must not be stricter than necessary to provide adequate confidence that products conform with applicable requirements (Art. 5.1.2).

WTO members are obligated to confirm the need for government intervention and set policy objectives accordingly (Art. 2.2 and Art. 5.1.2). They must identify alternatives to regulation, consider the option of not regulating, and consider the option of improving existing regulations rather than introducing new ones.

Assessing regulatory impact and avoiding unnecessary obstacles to trade also entails using relevant international standards as a basis for regulatory measures; recognizing the equivalence of other WTO members’ technical regulations; recognizing the results of conformity assessment in other members; defining available technical infrastructure; and using international and regional systems for conformity assessment. This process should also ensure any proposed measures are non-discriminatory (Art. 2.1, 2.2, 5.1, 5.2).

Performing a regulatory impact assessment requires using data (such as quantitative and/or qualitative) to identify impacts of alternatives; conducting cost-benefit analysis of alternatives (considering both direct and indirect impacts); assessing trade restrictiveness of alternatives; and assessing whether alternatives impose different requirements (including with respect to conformity assessment procedures) on foreign manufacturers (Art. 2.1, 2.2, 5.1, 5.2).

Score Criteria:
- 0  No application
- 1  Some application but inconsistent or incomplete
- 3  Adequate application
- 5  Broad, comprehensive application

4. Portability of conformity assessment results

The ease of doing business internationally depends on a company’s ability to leverage economies of scale, including those for testing and certification. There is great benefit from testing or certifying a product once and using these results to meet requirements in multiple markets, without the need for duplicating this work. To promote the portability of conformity assessment results, the TBT Agreement requires that WTO members shall:

- Whenever practicable, formulate and adopt international systems for conformity assessment and become members thereof or participate therein (Art.2.6 and 5.5).

- Give positive consideration to accepting as equivalent, technical regulations of other members, even if these regulations differ from their own, provided they are satisfied that these regulations adequately fulfil the objectives of their own regulations (Art. 2.7).

- Ensure that central government bodies use them, or the relevant parts of them, as a basis for their conformity assessment procedures, in cases where relevant guides or recommendations issued by international standardizing bodies exist or their completion is imminent (Art. 5.4).
• Play a full part, within the limits of their resources, in the preparation by appropriate international standardizing bodies of guides and recommendations for conformity assessment procedures, with a view to harmonizing conformity assessment procedures on as wide a basis as possible (Art. 5.5).

• Recognize “whenever possible” the results of conformity assessment procedures (such as test results or certifications), provided the member is satisfied that those procedures offer an assurance of conformity that is equivalent as its own. Without such recognition, products might have to be tested twice, first by the exporting country and then by the importing country. The agreement recognizes that members may need to consult in advance to arrive at a “mutually satisfactory understanding” regarding the competences of their respective conformity assessment bodies (Art. 6.1).

The TBT Agreement also encourages WTO members to enter into negotiations to conclude agreements providing for the mutual recognition of each other’s conformity assessment results (i.e., mutual recognition agreements or MRAs) (Art. 6.3).

Score Criteria:

0  No application
1  Some application but inconsistent or incomplete
3  Adequate application
5  Broad, comprehensive application

5. Predictability of outcome

The TBT Agreement requires consistency over time and between affected parties in application of the rules by the authority and by test labs. Completion of conformity assessment services, such as testing, must be completed on time and at agreed costs.

Score Criteria:

0  Unpredictable. Companies regularly must escalate issues to address surprises.
1  Mostly unpredictable. Companies are often unsure of outcomes.
3  Mostly predictable. The application of rules and completion of conformity assessment services are generally as expected.
5  Predictable. There are very few unexpected outcomes.

6. Surveillance Program

The WTO member government authority may have a surveillance program to check on the compliance of production units after granting initial approval or certification of a product. Requirements under a surveillance program include marketplace sample verification, visual verification, product test verification, factory audits and periodic renewal of approvals/certifications.

Score Criteria:
0 Annual or bi-annual product retesting by a laboratory in-country (Argentina model).
1 Two or more per year third-party factory audit of products (North American model).
3 Annual third-party factory audits based on quality management (EU model).
5 Market/customer sampling or complaint driven surveillance (Global, EU model).

7. Other considerations

Fees: In this scoring, ITI has not included information about fees directly related to the product safety approval process. For example, fees associated with certificate or license issuance typically range from about $1,000 to $4,000. In addition, there may be fees associated with renewal of third-party certificates or licenses, factory surveillance, or provision of product samples for unit verification testing. These fees are exacerbated when there are requirements for in-country testing of equipment. While such fees may have a cumulative impact, they are generally far less than the indirect costs associated with delays in getting products to market and costs resulting from greater regulatory uncertainty.

Product labeling: Regulatory requirements that include mandatory product labeling can also have a significant impact on the ease of doing business. Rules that require special types of labels such as holograms or those that force manufacturers to obtain labels with serial numbers that must be applied in a specific order to a large number of products are extremely burdensome. Additionally, products may have to be redesigned in order to meet labeling provisions. This often occurs with very small products with limited surface area that must accommodate a wide range of international regulatory marks and information.

This impact can be reduced when there is flexibility to place labels on the product, on the packaging, or in accompanying materials such as user manuals when the products are below a minimum size. Rules that do not include special printing instructions and those that permit manufacturers to mass produce the labels without prior communications with the regulating authority are also beneficial. Optimally, regulations would allow for the use of electronic labeling (e-labeling), where label information can be displayed on a device’s screen or via a machine-readable code (such as QR code) or web link on the product or packaging. The International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) are developing a standard for e labeling. Once adopted, this standard will help in the effort to have WTO member countries align their e-labeling requirements globally.
Conclusion

According to the WTO, non-tariff measures imposed by governments have almost twice the impact on ease of doing business as tariffs. Many of these non-tariff measures are the result of WTO member country unique requirements that, cumulatively, have created a global patchwork of standards and conformity assessment requirements, including those for ICT product safety. Without regulatory certainty and predictability, costs increase for manufacturers as they navigate complex rules and for governments as they expend more resources to manage compliance. Perhaps the biggest cost is the reduced consumer access to technologies that enable fundamental social and economic benefits.

ICT companies rarely manufacture products for a single country; they make products for the global market. Accordingly, to reap the full benefits of trade and investment in IT innovations, WTO member countries can choose to forego unique approaches to product safety, keep regulatory intervention to a minimum, follow good regulatory practices, and not impose unjustified impediments on trade, manufacturing, and supply chain operations. In this way, improving the ease of doing business in a country supports a stable, global regulatory environment that benefits all stakeholders while creating new societal and economic growth opportunities for their citizens who adopt and leverage the innovations created by the tech sector.